

SOV/137-59-3-7184

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 320 (USSR)

AUTHOR: Yakovlev, G.

TITLE: Multilayer Chrome Plating (Mnogosloynoye khromirovaniye)

PERIODICAL: Byul. tekhn. inform. Sovnarkhoz Kurskogo ekon. adm. r-na, 1958,
Nr 3, p 9

ABSTRACT: Multilayer plating was used for restoring the dimensions of worn machine parts by chrome plating to a thickness of $> 200 \mu$. The process was carried out in several stages, a 200μ layer with an allowance for machining being deposited at each step. After grinding, washing in water, heating to the electrolysis temperature, and passivation for 3-5 sec with a reverse current, the chrome plating is carried out in the following electrolyte (in g/liter): CrO_3 250, H_2SO_4 2.5, and Cr^{3+} 6 at $50-60^\circ$ and a cathode cd of $30-42 \text{ a/dm}^2$. The process is repeated as many times as is necessary to attain the required thickness, with the current gradually increased (in the course of 5-7 min) to $30-42 \text{ a/dm}^2$.

L. B.

Card 1/1

OSIPOV, Petr Yegorovich, kand. tekhn. nauk; YAKOVLEV, G.D., kand. tekhn. nauk, dots. st. nauchn. sotr., retsenzent; DMITRIYEV, Yu.Ya., dots., kand. tekhn. nauk, retsenzent; POGORELOV, V.I., red.

[Hydraulics and hydraulic machinery] Gidravlika i gidravlichеские mashiny. Izd.2., perer. i dop. Moskva, Lesnaia promyshlennost', 1965. 362 p. (MIRA 18:7)

1. Kafedra vodnogo transporta lesa Vsescyuznogo zaochnogo lesotekhnicheskogo instituta (for Yakovlev).

YAKOVLEV, G., inzhener.

Modernizing gas regulators. Zhil.-kom. khoz. 6 no.3:20-22 '56.
(MIRA 9:8)

(Gas governors)

LOGINOV, V.S., kand. tekhn. nauk, otv. red.; NIKITENKO, P.A., inzh., zam. otv. red.; LEVIN, A.M., kand. tekhn. nauk, red.; NIKITIN, N.I., inzh., red.; SMIRNOV, V.A., kand. tekhn. nauk, red.; YAKOVLEV, G.A., inzh., red.

[Construction and development of the production of household gas appliances] Konstruirovaniye i razvitiye proizvodstva bytovoi gazovoi apparatury. Saratov, Saratovskii in-t "GIPRONIIGAZ," 1960. 177 p. (MIRA 15:7)

1. Nauchno-tehnicheskoye soveshchaniye po voprosu "Puti konstruirovaniya i razvitiya proizvodstva bytovoy gazovoy apparatury," Saratov, 1958. 2. Saratovskiy gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut po ispol'zovaniyu gaza v narodnom khozyaystve (for Nikitin).
(Gas appliances)

NIKITIN, N., inzh. (g. Saratov); YAKOVLEV, G., inzh. (g. Saratov)

Simplified designs of enclosures for liquefied gas containers.
Zhil.-kom. khoz. 10 no.7:27 '60. (MIRA 13:10)
(Liquefied petroleum gas--Storage)

LOGINOV, V.S., kand.tekhn.nauk; YAKOVLEV, G.A., inzh.

Planning and laying urban asbestos-cement gas lines. Stroi.
truboprov. 6 no.4:25-27 Ap '61. (MIRA 14:6)

1. Giproniigaz, g. Saratov.
(Gas pipes) (Pipe, Asbestos-cement)

ALEKSANDROVICH, Yu.B., inzh., red.; KAMAYUROV, V.A., inzh., red.;
YAKOVLEV, G.A., inzh., red.; STRASHNYKH, V.P., red.izd-
va; NAUMOVA, G.D., tekhn. red.

[Construction specifications and regulations] Stroitel'nye
normy i pravila. Moskva, Gosstroizdat. Pt.2. Sec.G. ch.13.
[Gas delivery. Exterior systems and equipment; design specifi-
cations] Gazosnabzhenie. Naruzhnye seti i sooruzheniya; normy
proektirovaniia (SNiP II-G. 13-62). 1963. 27 p.
(MIRA 17:1)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam
stroitel'stva. 2. Gosstroy SSSR (for Aleksandrovich). 3. Go-
sudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut
Ministerstva kommunal'nogo khozyaystva RSFSR (for Kamayurov,
Yakovlev).

ALEKSANDROVICH, Yu.B., inzh., red.; YAKOVLEV, G.A., inzh., red.;
STRASHNYKH, V.P., red.izd-va; MOCHALINA, Z.S., tekhn.
red.

[Construction specifications and regulations] Stroitel'-
nye normy i pravila. Moskva, Gosstroizdat. Pt.2. Sec.G.
ch.11.[Gas delivery, internal gas equipment; specifica-
tions for designs] Gazosnabzhenie, vnutrennee gazooboru-
dovanie; normy proektirovaniia (SNiP II-G. 11-62).
1963. 16 p. (MIRA 16:10)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po de-
lam stroitel'stva. 2. Gosstroy SSSR (for Aleksandrovich).
3. Saratovskiy gosudarstvennyy nauchno-issledovatel'skiy i
proyektnyy institut Ministerstva kommunal'nogo khozyaystva
RSFSR (for Yakovlev).

(Gas distribution)

GUSAKOV, S.F., inzh., red.; SHAPIRO, L.L., kand. tekhn. nauk,
red.; YAKOVLEV, G.A., inzh., red.; KOMAYUROV, V.A., inzh.,
red.

[Construction specifications and regulations] Stroitel'nye
normy i pravila. Moskva, Gosstroizdat. Pt.3. Sec.G. ch.7.
[Gaz supply: Outdoor systems and installations; regulations
for the organization, performance and acceptance of work]
Gazosnabzhenie: Naruzhnye seti i sooruzheniya; pravila or-
ganizatsii i proizvodstva rabot, priemka v ekspluatatsiu
(SNiP III-G. 7-62). 1963. 31 p. (MIRA 17:3)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam
stroitel'stva. 2. Gosstroy SSSR (for Gusakov). 3. Mezhdunar-
donstvennaya komissiya po peresmotru Stroitel'nykh norm i
pravil (for Shapiro). 4. Saratovskiy gosudar-
stvennyy nauchno-issledovatel'skiy i proyektnyy institut po
ispol'zovaniyu gaza v narodnom khozyaystve (for Yakovlev,
Komayurov).

YAKOVLEV, G.A.

Basic technical solutions for the construction of standardized
models of gas flow water heaters. Gaz. prom. 9 no.12:14-17 '64.
(MIRA 18:3)

L 39284-65 EWT(1)/EWP(e) EPA(e)-2/EWT(m)/EWP(1)/EPR/EWP(1)/
EPA(bt)-2, Et , E4A(1), CH -x F-1, Pf-1, Pt-1, Ps-1, Pt-1, YW OM. IS P
ACCESSION NR: AT5000829 S/0000/64/000/004/C329/0338

AUTHOR: Yakovlev, G. A. (Kiev)

TITLE: Heat resistance of glass fabric filled plastics

SOURCE: Nauchnoye soveshchaniye po teplovym napryazheniyam v elementakh konstruktsiy, 4th. Teplovyye napryazheniya v elementakh konstruktsiy (Thermal stresses in construction elements); doklady soveshchaniya, no. 4. Kiev, Naukova dumka, 1964, 329-338

TOPIC TAGS: plastic heat resistance, glass filled plastic, plastic thermal shock, thermal stress, glass fabric, thermal fatigue, plastic mechanical property

ABSTRACT: Glass fabric filled plastics are being widely used in structures under different thermal conditions. Thus, in rocketry, the glass fabric filled plastics must resist the short-term action of temperatures of about 3500K, while in aviation engines, these plastics work for a long time under either unstable or constant thermal conditions. The strength of glass fabric filled plastics under the long-term action of high temperatures either drops, remains constant or increases, depending on the material, temperature level and duration. Glass fabric

Card 1/3

L 39284-65
ACCESSION NR: AT5000829

3

filled plastics were subjected to heating-cooling cycles on a machine designed in the Institut mekhaniki Akademii nauk UkrSSR (Institute of Mechanics, Academy of Sciences of the UkrSSR) ensuring high accuracy of temperature application, uniform heating over the entire length and perimeter at a certain heating rate, air cooling of the samples, as well as automatic investigations under a set program. No external forces were involved in the test. Type Sk-9E and EF-32-30 glass fabric filled plastics were used. All samples were first passed through an IAD-2 machine for detecting defects before being tested. Chromel-alumel thermocouples were placed into special control samples for temperature measurement. At present, the criterion of resistance to thermal shock is the variation in strength under static loads after the action of heat. The samples passed 0, 100, 200, 300, 400 or 600 heating-cooling cycles. It is well known that these criteria depend on thermal fatigue and chemical reactions. The author also proposed other methods of determining the resistance to thermal shock. Thus, the chemical resistance to thermal shock was determined as the depth of thermal disintegration of the polymer binder. There is a definite relationship between the variation in hardness of the glass fabric filled plastic and chemical reactions.

Card 2/3

L 39284-65
ACCESSION NR: AT5000829

This index may be used as an indicator of resistance. The depth of thermal dissipation was found by determining the weight loss of the polymer. Thermal fatigue was estimated by the Glagolev method. It was found that the strength dropped by 10% after 300 heating-cooling cycles. The author concludes that the strength of glass fabric filled plastics may either increase or decrease depending on the number of heating-cooling cycles, type of heat load, as well as the type of polymer. The type of polymer and preliminary heat treatment determine, to a great extent, the chemical reactions which lead to strengthening or weakening of the material. A loss in weight of the polymer does not always lead to lower strength, as seen when the strengthening processes are predominant in relation to the weakening processes. Hardness increases or decreases depending on the same processes. The proposed complex study of resistance under thermal shock allows the mechanism of disintegration of the material to be studied more deeply and thus permits a determination of which material is best for structures under the given working conditions. Orig. art. has: 5 figures.

ASSOCIATION: None

ENCL: 00

SUB CODE: MT

SUBMITTED: 02Jan64

OTHER: 005

NO REF Sov: 007

Card 3/3

GRUZINSKAYA, V.; MALYATSKIY, L.; RAYEVA, Yu.; SHARETS, D.; YAKOVLEV, G.

A new geography draft program for the eight-year school. Geog.
v shkole 22 no.4:1-7 Jl-Ag '59. (MIRA 12:11)
(Geography--Study and teaching)

YAKOVLEV, G.F., Cand Tech Sci -- (diss) "Selection of rational forms of organization of production in the ~~case of~~ plant repair of locomotive diesels." Len, 1959, 16 pp (Min of Railways USSR. Len Order of Lenin Inst of Engineers of Railroad Transport im Academician V.N. Obraztsov)
150 copies (KL, 34-59, 115)

- 63 -

YAKOVLEV, G.F., dots.

Selecting efficient forms of production organization for diesel
shops in diesel locomotive repair plants, Shor. LIZHT no. 160:
144-162 '58. (MIRA 12:5)

(Railroads--Repair shops)
(Diesel locomotives)

YAKOVLEV, G.F., dotsent

Structure of diesel shops in the diesel locomotive repair plants.
Sbor. LIIZHT no.168:120-134 '60. (MIRA 13:10)
(Railroads--Repair shops)

YAKOVLEV, G.F.

Geological mapping of closed folded regions. Sov.geol. no.42:33-34
'55. (MLRA 8:6)
(Geology--Maps) (Folds(Geology))

YAKOVLEV, G. F.

USSR/Geology

Card 1/1 Pub. 22 - 39/54

Authors : Gorzhevskiy, D. I.; Komar, V. A.; and Yakovlev, G. F.

Title : Structural-phase and metagenic zones of the ore-rich Altay

Periodical : Dok. AN SSSR 102/5, 999-1000, Jun 11, 1955

Abstract : Geological data are presented regarding the structural-phase and metagenic zones of the ore-rich Altay country (Siberia). Five USSR references (1938-1955).

Institution : Ministry of Geol. and Protection of Mineral Resources, All-Union Aerogeological Trust

Presented by : Academician A. G. Betehtin, January 15, 1955

YAKOVLEV, G.F.

Materials on the tectonics of the Rudnyy Altai. Trudy VAGT no.3:
120-141 '57. (MIRA 11:3)
(Altai Mountains--Geology, Structural)

YAKOVLEV, G.F.
GORZHEVSKIY, D.I.; YAKOVLEV, G.F.

Characteristics of the distribution of complex metal deposits in
the Rudnyy Altai. Trudy VAGT no.3:142-161 '57. (MIRA 11:3)
(Altai Mountains--Ore deposits)

GORZHEVSKIY, D.I.; YAKOVLEV, G.F.

Manifestation of the Telbess phase in the tectogenesis of the
Rudnyy Altai [with summary in English]. Sov. geol. 1 no.4:73-80
Ap '58. (MIRA 11:6)

1. Vsesoyuznyy aerogeologicheskiy trest Ministerstva geologii
i okhrany nedr SSSR.
(Altai Mountains--Geology, Structural)

YAKOVLEV, G.F.

Structures of ore regions, fields, and deposits of the Rundyy Altai.
Zakonom. razm. polezn. iskop. 2:332-350 '59. (MIRA 15:4)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Altai Mountains--Ore deposits)

YAKOVLEV, G.F.; VYIRIN, V.N.

Structural characteristics of the distribution of complex
ore deposits in Zmeinogorsk District (Rudnyy Altai). Izv.
vys.ucheb.zav.; geol.i razv. 2 no.10:48-63 O '59.
(MIRA 13:6)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Zmeinogorsk District—Ore deposits)

YAKOVLEV, G.F.

Origin of various subtypes in the altai complex ore deposits.
Izv. vys. ucheb. zav.; geol. i razv. 2 no.12:109-114 '59.

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Altai Mountains--Ore deposits)

YAKOVLEV, G.F.

Conference on metallogeny held in Novosibirsk. Izv. AN SSSR. Ser.
geol. 24 no.12:122 D '59. (MIRA 13:8)
(Altai Mountains--Ore deposits)
(Sayan Mountains--Ore deposits)

YAKOVLEV, G. F., Doc Geol-Min Sci -- (diss) "Tectonic structures of the Rudniy Altay, and the history of its development in the distribution of polymetallic deposits." Moscow, 1960. 41 pp; 3 pages of tables; (Inst of the Geology of Ore Deposits, Petrography, Mineralogy, and Geochemistry of the Academy of Sciences USSR, Moscow Order of Lenin and Order of Labor Red Banner State Univ im M. V. Lomonosov); 150 copies; price not given; list of author's work on pp 40-41 (13 entries); (KL, 24-60, 129)

S/011/60/000/005/002/002
A054/A129

AUTHOR: Yakovlev, G.F.

TITLE: The metallogenetic map of the USSR

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya geologicheskaya, no. 5, 1960,
122 - 124

TEXT: At the meeting of the Mezhvedonstvennyy nauchnyy sovet po izucheniyu zakonomernostey razneshcheniya poleznykh iskopayemykh (Interdepartmental Scientific Council for the Investigation of the Distribution Rules of Useful Minerals) held in the IGEM of the USSR Academy of Sciences on November 25, 1959, the metallogenetic map of the USSR (to a scale of 1 : 5,000,000) was discussed. The map was plotted by the VSEGEI of the Ministry of Geology and Preservation of Natural Resources and other organizations under the editorship of V.G. Grushevyy, G.S. Labazin, A.I. Semenov, P.M. Tatarinov et al. In addition to the members of the scientific council the meeting was also attended by representatives of the VSEGEI, IGEM AS-USSR, MGU, etc. In his opening address, Academician D.I. Shcherbakov commented on the value of the map which will promote the planning of prospecting operations. The scientific principles and method followed by the editors of the

Card 1/3

S/011/60/000/005/002/002
A054/A129

The metallogenetic map of the USSR

map were reported by Doctor of Geologic-Mineralogical Sciences A.I. Semenov, representative of the VSEGEI. The new map covers the magmatic and metallogenetic territories of the USSR in full and is plotted on a geological-tectonical basis. As reference, the "Tectonic Map of the USSR and Neighboring Countries" (by Academician N.S. Shatskiy) and the "Geologic Map of the USSR" (by D.V. Nalivkin) moreover the latest maps covering various areas (Caucasus, Central Asia, Altai, Kazakhstan, etc.), the results obtained from magnetometric and gravimetric surveys, drillings in platform and folded structures, were also used. The new map contains details of the Pre-Cambrian folded areas, the Paleozoic, Mesozoic and Kainozoic foldings, the primitive platforms, Epipaleozoic and Epimesozoic platforms. Based on the data of geophysical investigations and structural borings, the isohypsoi of the foundation are plotted in primitive and Epipaleozoic platforms. The intrusive rocks are indicated according to the geotectonics of the evolution, their age and composition. The cleavages plotted are divided into three groups: 1) deep cleavages; 2) cleavages in platform foundations; and 3) the main faults and thrusts. In the Ukrainian, Baltic and Anabar shields their characteristic sediment-volcanic, terrigenic and metamorphic formations are given, for the Western-Siberian Epipaleozoic platform sections are plotted based on deep-drillings. The useful minerals are divided into genetic groups: magmatic, pegmatite, scarn, hy-

Card 2/3

S/011/60/000/005/002/002

A054/A129

The metallogenetic map of the USSR

drothermal, telethermal, metamorphic, exogenic and uncertain origins. The map indicates the most important evolution stages of foldings and platforms and establishes the correlation between sediment-accumulations, tectonics, magmatism and mineralization in time and space. The structural-metallogenetic and ore-containing zones of the USSR are plotted in the map based on all these data. Besides the deposits already surveyed, forecasts of possible new deposits are also indicated. In the discussion the following persons took part: Academician D.I. Shcherbakov, Corresponding Member of the USSR Academy of Sciences V.I. Smirnov, Doctor of Geologic-Mineralogical Sciences Yu.A. Aranov, G.A. Sokolov, Ye.T. Shatalov, Yu.M. Sheymann. The commentators considered it a drawback of the new map that the metallogenetic aspects are not dealt with sufficient thoroughness, the metallogenetic periods corresponding with the stages of sediment accumulation, the forming of tectonic structures and magmatism are not defined; in some cases the borders and evolution periods for structural-metallogenetic zones are not established adequately and require a more substantial foundation.

Card 3/3

BARANOV, V.D.; YAKOVLEV, G.F.

Structure of complex metal deposits in the Zyryanovsk region
(Rudnyy Altai) and its role in the distribution of mineralization.
Izv.vys.ucheb.zav.;geol.i razv. 4 no.10:78-91 O '61. (MIRA 14:12)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
(Zyryanovsk region--Ore deposits)

VAKOVLEV, G.F.

Tectonic regularities in the location of complex ore deposits in the
Rudnyy Altai. Zakonom. razm. polezn. iskop. 5:159-189 '62. (MIRA 15:12)

1. Moskovskiy gosudarstvennyy universitet.
(Altai Mountains—Ore deposits)

YAKOVLEV, G.F.

"Structural conditions governing the formation of ore deposits"
by IA.N.Belevtsev. Reviewed by G.F.Iakovlev. Izv. AN SSSR.
(MIRA 15:9)
Ser.geol. 27 no.9:109-111 S '62.
(Ore deposits) (Belevtsev, IA.N.)

DISTANOV, E.G.; YAKOVLEV, G.F.

Endogenetic ore formations in Siberia and in the Far East. Izv.
AN SSSR. Ser. geol. 29 no.10:140-142 0 '64.

(MIRA 17:11)

SMIRNOV, V.I., glav. red.; ZAKHAROV, Ye.Ye., red.; MAGAK'YAN, I.G.,
red.; SOKOLOV, G.A., red.; YAKOVLEV, G.F., red.

[Problems of ore genesis] Problemy genezisa rud. Moskva,
Nedra, 1964. 384 p. (Its Doklady sovetskikh geologov,
Problema 5) (MIRA 17:8)

1. International Geological Congress. 22d, 1964.

YAKOVLEV, G.F.; ZARAYSKIY, G.P.; STAROSTIN, V.I.

Acid subvolcanic bodies and copper pyrite mineralization in
the Blyava region (Southern Urals). Sov. geol. 8 no.4;3-18 Ap
'65. (MIRA 18:7)

1. Moskovskiy gosudarstvennyy universitet.

SOKOLOV, B.M., kand.tekhn.nauk; DIREKTOR, B.Ya., inzh.; LOSHAK, S.B., inzh.;
POLUKHIN, A.I., inzh.; YAKOVLEV, G.G., inzh.

Experience in the use of power units with supercritical pressures
and prospects of their development. Teploenergetika 12 no.7:2-9
(MIRA 18:7)
J1 '65.

1. Gosudarstvennyy trest po organizatsii i ratsionalizatsii
rayonnykh elektrostantsiy i setey.

L 22563-66

ACC NR: AP6012931

SOURCE CODE: UR/0104/65/000/007/0007/0015

AUTHOR: Markin, V. P. (Engineer); Rtishchev, S. P. (Engineer); Yakovlev, G. G. 19
(Engineer) B

ORG: none

TITLE: Results of startup and adjusting operations on the 300 Mw power unit

SOURCE: Elektricheskiye stantsii, no. 7, 1965, 7-15

TOPIC TAGS: power plant component, steam boiler

ABSTRACT: Results are presented from startup and tuning of the 300 Mw power unit at the Pridneprovskiy power plant. All the main equipment as well as the greater part of the supplementary equipment are new models. The article describes the equipment in detail, presents the thermal plan of the unit, then goes on to describe the prestart operations, publication of documents for training of service personnel, checking and installation of equipment, preliminary testing, etc. Chemical cleaning of the equipment removed 7,000 kg of iron oxide from the boilers, etc. Graphs of the temperatures and pressures encountered versus time during the startup operations are presented. The authors recommend that chemical cleaning be accomplished in such equipment with high flow rates, that the steam pipes of the boiler be blown out with externally supplied steam. Flow reversal in individual coils was not fully

Card 1/2

UDC: 621.311.22.004

L 22563-66

ACC NR: AP6012931

eliminated. The authors call for further work in this direction. Considerable difficulties were encountered in firing the boiler after short time standing.
Orig. art. has: 5 figures. [JPRS]

SUB CODE: 10, 13 / SUBM DATE: none

Card 2/2 BK

YAKOVLEV, G. I.

Yakovlev, G. I. and Krol', M. I. - "Results of mechanization of concrete work",
Gor. kholz-vo Moskvy, 1949, No. 1, p. 22-24.

SO: U-3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 8, 1949).

YAKOVLEV, G.I., inzhener.

Efficient construction of casings for girderless floors. Gor.khoz.Mosk.
23 no.11:36 N '49. (MIRA 6:11)
(Reservoirs)

1. YAKOVLEV, G.I., SYCHEV , I.G.
2. USSR (600)
4. Brickmaking
7. Mechanizing the loading of containers with bricks in brick plants.,
Stek.i ker., 9, No.11, 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

1. YAKOVLEV, G.I.) SYCHEV, I. G.
 2. USSR (600)
 3. Loading and Unloading
 4. Mechanized loading of containers with red bricks on trucks.
Gor. kholz. Mosk-26 No. 11 - 1952.

9. Monthly List of Russian Accessions, Library of Congress, February, 1953. Unclassified.

L 06140-67 EWP(m)/EWT(1)/EWT(m) WW
ACC NR: AP6031171

SOURCE CODE: UR/0361/66/000/002/0061/0068

AUTHOR: Polyakov, A. I.; Yakovlev, G. I.

33
F3

ORG: none

19

TITLE: Nonresonant inversion of nuclei in a fluid stream

SOURCE: AN KazSSR. Izvestiya. Seriya fiziko-matematicheskikh nauk, no. 2, 1966, 61-68

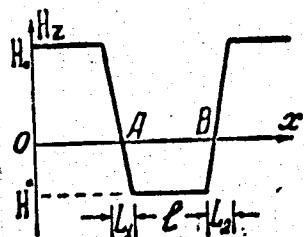
TOPIC TAGS: nuclear magnetic moment, nuclear magnetic resonance

ABSTRACT: A method of producing an almost complete reversal of nuclear magnetic moments in a fluid moving at relatively small velocities is described. A previously polarized liquid moves along the x -axis. After passing the point A, the net magnetization vector of the fluid is turned relative to the external field by a certain angle α . At the point B the net magnetization is somewhat smaller in magnitude because of relaxation. The relaxation times parallel and perpendicular to the external field are different, however, so that the magnetization vector after point B is at an angle β which is in general different from α . Experimental verification of this effect is obtained and practical applications are suggested. Orig. art. has: 8 formulas, 7 figures.

Card 1/2

L 06140-67

ACC NR: AP6031171



SUB CODE: 20/ SUBM DATE: 14Apr65/ ORIG REF: 002/ OTH REF: 013

Card 2/2 MLE

OSIPOV, Lev Georgiyevich, kand. tekhn. nauk, dots.; YAKOVLEV,
Georgiy Ivanovich, dots.; MASLENNIKOV, G.P., nauchn. red.

[Principles of construction work] Osnovy stroitel'nogo dela.
Moskva, Vysshiaia shkola, 1962. 388 p. (MIRA 17:5)

KUZMIN, Fedor Kuz'mich; YAKOVLEV, Grigoriy Ivanovich; SEMENENKO, P.I.,
red.; FOMICHENKOV, A.G., red. izd-va; BOL'SHAKOV, V.A., tekhn.
red.

[Progressive method for cutting trapezoid screw thread] Prog-
ressivnyi metod narezaniia trapetseidal'noi rezby. Leningrad,
1962. 11 p. (Leningradskii Dom nauchno-tehnicheskoi propa-
gandy. Opyt novatorov. Seriia: Mekhanicheskaya obrabotka metal-
lov, no.4) (MIRA 15:3)

(Screw cutting)

YAKOVLEV, G. I.

Some data on the quantitative determination of color vision defects.
Vest. oft. 69 no.4:14-16 Jl-Ag '56. (MLR 10:9)

1. Iz kafedry oftalmologii (nach. - dotsent P. I. Gepeyev) Voyenno-Morskoy meditsinekoy akademii
(COLOR VISION
disord., quantitative determ.)

YAKOVLEV, G.I.

BORODIN, Ivan Vasil'yevich, kandidat tekhnicheskikh nauk, dotsent; GRI-GOR'YEV, Ye.A., inzhener, retsenzent; DANILOV, P.M., inzhener, retsenzent; VANIN, V.I., inzhener, retsenzent; YAKOVLEV, G.I., dotsent, redaktor; SMOL'YAKOVA, M.V., tekhnicheskiy redaktor

[Organization and planning of water-supply and sewerage construction and assembling work] Organizatsiya i planirovanie stroitel'nomontazhnykh rabot po vodosnabzheniiu i kanalizatsii. Moskva, Gos. izd-vo lit-ry po stroit. i arkhit., 1955. 305 p. (MLRA 8:7)
(Water supply engineering) (Sewerage)

ZHERNOVY, A.I.; YAKOVLEV, G.I.

VII

Observation of negative hydration by the method of nuclear magnetic resonance. Zhur.strukt.khim. 4 no.6:914 N-D '63. (MIRA 17:4)

1. Institut yadernoy fiziki AN KazSSR.

YEKATERININ, V.V.; ZHERNOVOY, A.I.; YAKOVLEV, G.I.

Nuclear magnetic resonance spectrometer in a weak field.
Izv. AN Kazakh. SSR, Ser. fiz.-mat. nauk no. 2:58-62 '63.
(MIRA 17:6)

L 9623-66 EWT(1)

IJP(c)

WW/GG

SOURCE CODE: UR/0056/65/049/003/0760/0764

ACC NR: AP5024695

44,55

44,55

59

AUTHOR: Polyakov, A. I.; Yakovlev, G. I.

ORG: Institute of Nuclear Physics of the Academy of Sciences KazakhSSR (Institut
yadernoy fiziki Akademii nauk Kazakhskoy SSR) B

TITLE: Observation of pulsed nucleus-nucleus polarization

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 3, 1965,
760-764

21, 44, 55

TOPIC TAGS: nuclear magnetic resonance, alkali metal, proton polarization, line in-
tensity, relaxation process, solvent action, hydrogen bonding

ABSTRACT: The authors have investigated double nuclear magnetic resonance in concentrated sodium, potassium, and calcium hypophosphate solutions by the method of transient dynamic polarization of I. Solomon (Phys. Rev. v. 99, 959, 1955 and J. Chem. Phys. v. 25, 261, 1956), using a flow-through measuring head described by J. Henequin (Ann. d. Phys. v. 6, 949, 1961). The procedure and apparatus are described briefly. The results show that with change in the intensity of the solvent line, the hypophosphate proton-like intensities increase greatly, sometimes by a factor of three. The experiments also show that polarization of the hypophosphate protons does not result from relaxation processes but appears at the instant when a radio-frequency pulse is applied to the solvent protons, the characteristic time for the appearance of polarization being much shorter than the transverse relaxation times of the solvent

Card 1/2

L 9623-66

ACC NR: AP5024695

O

and hypophosphate protons. Polarization of the hypophosphate protons by the solvent protons is attributed to molecular association based on the hydrogen bond. The mechanism of the observed polarization is not explained. Orig. art. has: 4 figures and 1 formula.

SUB CODE: 20/ 00/ SUBM DATE: 27Apr65/ ORIG REF: 001/ OTH REF: 007

Card 2/2

L 33610-65 EEC-L/EEC(L)-2/EWT(d)/EWT(L)/EEC(t) Pg-L/Pk-L/Fl-L/Po-L/Fq-L/Fed

IJP(c)

ACCESSION NR: AP5005958

S/0048/65/029/002/0304/0305

AUTHOR: Zhernovoy, A. I.; Polyakov, A. I.; Yakovlev, G. I.

TITLE: Effect of nuclear nutation in inhomogeneous magnetic fields /Report, 14th Annual Conference on Nuclear Spectroscopy held in Tbilisi, 14-22 Feb 1964./

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.29, no.2, 1965, 304-305

TOPIC TAGS: nuclear magnetic resonance, magnetic field measurement, inhomogeneous magnetic field, alternating magnetic field

ABSTRACT: This paper is concerned with the nuclear magnetic resonance measurement of magnetic fields by means of a head employing a flowing working substance (A.I. Zhernovoy, Yu.S.Yugorov and G.D.Latyshev, Inzh.-fiz.zhur.1, No.9, 123, 1958; Pribory i tekhnika eksperimenta No.5, 71, 1958). In instruments for this purpose it is necessary to effect a rotation by at least 270° of the mean nuclear magnetization of the working substance by interaction with a resonant high-frequency field in the presence of a static magnetic field. This is difficult to achieve because of the inhomogeneity of the applied magnetic field. The authors have found that realization of the requisite degree of magnetization reversal is greatly facilitated by

Card 1/2

L 33610-65
ACCESSION NR: AP5005958

application of an alternating magnetic field of amplitude equal to the inhomogeneity of the constant magnetic field and frequency such that 5 to 10 cycles are completed during the passage of a particle of the working substance through the field. This phenomenon is briefly discussed theoretically and some experimental results are presented. The effect is sufficiently sensitive to the amplitude of the alternating field that it can be employed to estimate the inhomogeneity of the constant field. In the operation of the nuclear magnetic resonance head it is not only desirable to keep the "nutation relaxation time" (which depends on the inhomogeneity of the field) as small as possible but also to keep the time spent by a particle of the working substance in the field short compared with the relaxation time.
Orig.art.has: 2 formulas and 3 figures.

ASSOCIATION: none

SUBMITTED: CO

ENCL: 00

SUB CODE: EM,NP

NR REF Sov: 002

OTHER: 000

Card 2/2

L 33608-65 EWT(1)/EEC(t) Feb IJP(c)

ACCESSION NR: AP5005960

S/0048/65/029/002/0311/0312

AUTHOR: Zhernovoy, A. I.; Polyakov, A. I.; Yakovlev, G. I.

TITLE: Concerning the width of the nuclear magnetic resonance line in a flow probe
Report, 14th Annual Conference on Nuclear Spectroscopy held in Tbilisi, 14-22 Feb
1964

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.29, no.2, 1965, 311-312

TOPIC TAGS: nuclear magnetic resonance, magnetic field measurement, inhomogeneous
magnetic field

ABSTRACT: This paper is concerned with the nuclear magnetic resonance measurement
of magnetic fields by means of a head employing a flowing working substance. It is
pointed out that the nuclear magnetic resonance line is broadened as a result of
saturation by the high-frequency field, distortion of the high-frequency field in
the region of the head, and inhomogeneities of the static field in the directions
parallel and perpendicular to the flow of the working substance. These effects are
discussed very briefly and some experimental results are presented. In order to ob-
tain optimal results (minimum width of the nuclear magnetic resonance line) it is

Card1/2

L 33608-65

ACCESSION NR: AP5005960

desirable to orient the head so that the flow of the working fluid is parallel to the gradient of the magnetic field and to select optimal values of the flow rate and the strength of the high-frequency field. Orig. art. has 5 formulas, 2 figures and 1 table.

ASSOCIATION: none

SUBMITTED: OO

ENCL: 00

SUB CODE: EM,NP

NR REF Sov: 004

OTHER: 002

Card 2/2

L 33607-65 EEC-4/EEC(b)-2/ENG(j)/EEC(k)-2/EWA(h)/EWA(k,)/EMP(k)/EWT(d)/EWT(l)/
EEC(t)/FBD/T/EWA(m)-2/PF-4/Fg-4/Pi-4/Pl-4/Pn-4/Po-4/Peb IJP(c)

W3 8/0048/65/029/002/0313/0314 21
ACCESSION NR: AP5005961 15

AUTHOR: Zhernovoy, A. I.; Polyakov, A. I.; Yakovlev, G. I.

TITLE: Nonresonant nutation in nuclear magnetic resonance Report, 14th Annual
Conference on Nuclear Spectroscopy held in Tbilisi, 14-22 Feb 1964

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.29, no.2, 1965, 313-314

TOPIC TAGS: nuclear magnetic resonance, magnetic field measurement, maser 25

ABSTRACT: This paper is concerned with nuclear magnetic resonance measurement of uniform magnetic fields by means of a maser employing a flowing working medium (H. Benoit, Ann.Physik, 4, No.11-12, 1439, 1959). The alignment of nuclear spins by non-resonant nutation is discussed briefly and a simple maser based on this principle is described even more briefly. This maser operated in a 35 Oe field and employed water as the working substance. The protons were polarized in the 8 kOe field of a permanent magnet and the water was caused to flow through a region in which the magnetic field, transverse to the flow, changed sign twice. Orig.a:t.has: 3 formulas and 2 figures.

Card 1/2

L 33607-65

ACCESSION NR: AP5001961

ASSOCIATION: none

SUBMITTED: OO'

ENCL: 00

SUB CODE: EM,MP

NR REF SCW: 001

OTHER: 001

Card 2/2

L 32816-66 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l)

ACC NR: AP6005384

SOURCE CODE: UR/0413/66/000/001/0126/0126

10
9
B

INVENTOR: Timofeyev, D. V.; Yakovlev, G. I.

ORG: None

TITLE: Polyhedral hard-alloy cutting plate. Class 49, No. 177737

SOURCE: Isobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 126

TOPIC TAGS: cutter, cutting plate, polyhedral cutter, hard alloy cutter

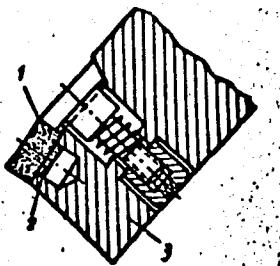
ABSTRACT: An author certificate has been issued for a polyhedral hard-alloy cutting plate. To increase its strength and the possibility of making holes of various shapes and sizes with its leading edge, the plate is made in one piece with a cross section in the form of an equilateral trapezoid and a shoulder on the bearing surface for securing the plate to the holder (See fig. 1)

UDC: 621.9.025.7

Card 1/2

L 32816-66

ACC NR: AP6005384

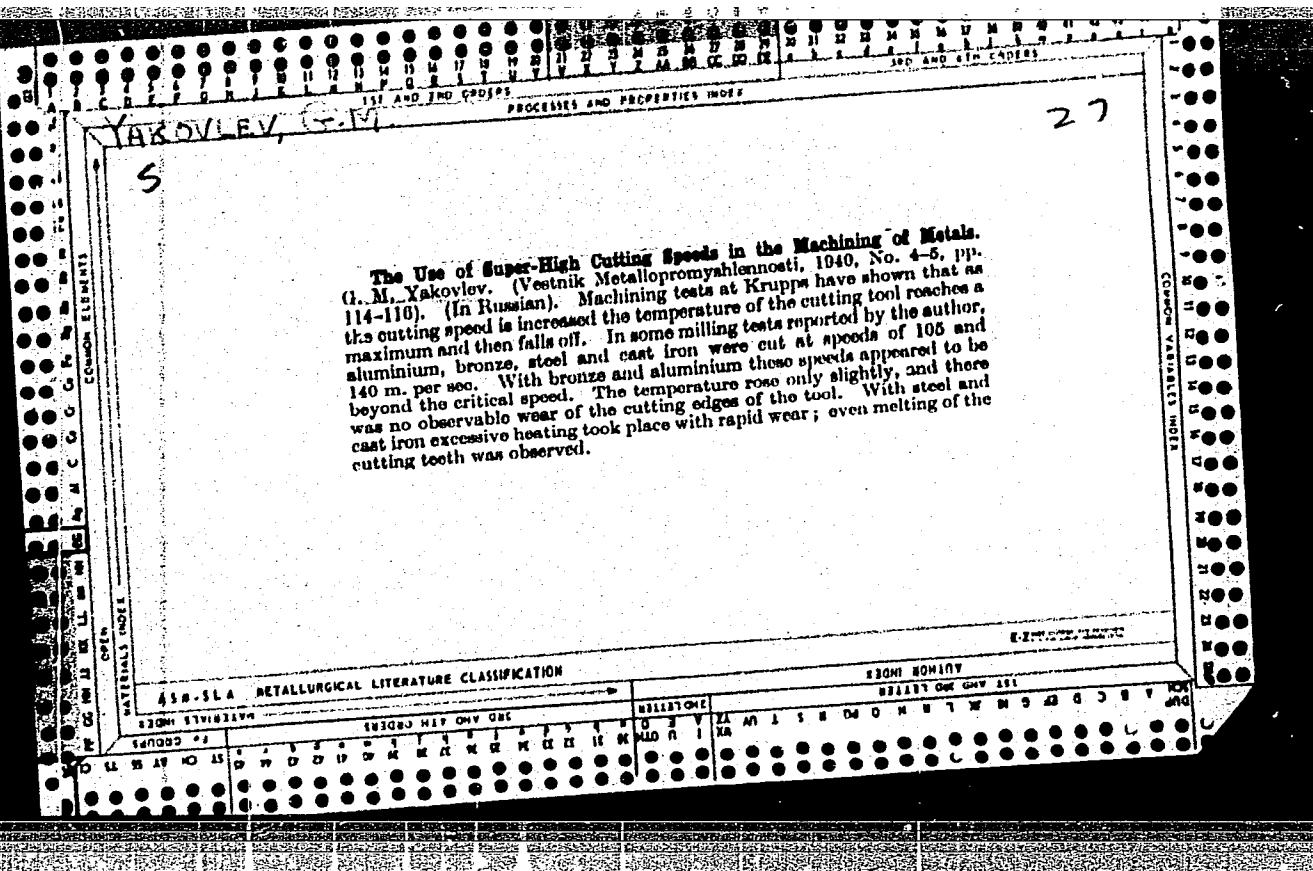


cutting tool

SUB CODE: 13/ SUBM DATE: 19Sep62

Polyhedral hard-alloy cutting plate
1— plate;
2— shoulder;
3— holder

Card 2/2 80



1. YAKOVLEV, G. M.
2. USSR (600)
4. Technology
7. Reference book for a machine-tool operator-machine-builder dealing with rational use of metal-cutting machines. Minsk, Gosizdat BSSR, 1951
9. Monthly List of Russian Accessions, Library of Congress, February 1953, Unclassified.

YAKOVLEV, G.M.

SHUL'MAN, P.T., inzhener, laureat Stalinskoy premii; KUZNETSOV, V.O.,
inzhener, laureat Stalinskoy premii; KHAET, G.L., inzhener;
YAKOVLEV, G.M., inzhener; DOTSENKO, M.G., redaktor; NESTEREN-
KO, D.M., tekhnicheskiy redaktor.

[High-speed metal cutting; experience of the Novo-Kramatorsk
Stalin Machine Construction Plant (Order of Lenin)] Shvydkaina
obrobka metaliv rizanniam; dosvid novo-kramators'koho ordena
Lenina mashynobudivnogo zavodu imeni Stalina. Kyiv, Derzhavne
naukovo-tekhnik. vyd-vo mashynobudivnoi lit-ry, 1952. 103 p.
(Metal cutting) (MLRA 8:2)

YAKOVLEV, G. M.

Frezerovanie v napravlenii podachi Milling in the direction of the feed. Minsk, Gosizdat BSSR, 1952. 116 p.

SO: Monthly List of Russian Accessions, Vol 6 No 6 September 1953

YAKOVLEV, G.M.; GORANSKIY, G., redaktor; TRUKHANOVA, A., tekhnicheskiy
redaktor

[Milling; manual for the operators of milling machines] Frezero-
vanie; spravochnoe posobie dlja frezerovshchika. Minsk, Gos. izd-
vo BSSR, Red. nauchno-tekhn. lit-ry, 1954. 268 p. (MIRA 8:7)
(Milling machines)

YAKOVLEV, G.M.; GORANSKIY, G.K., redaktor; TRUKHANOVA, A., tekhnicheskiy
redaktor.

[Drilling, countersinking and reaming] Sverlenie, zenkerovanie,
razvertyvanie. Pod red. G.K.Goranskogo. Minsk, Gos. izd-vo BSSR,
Red. nauchno-tekhn. lit-ry, 1954. 163 p. [Microfilm] (MLRA 8:2)
(Drilling and boring)

GORANSKIY, G.K.; YAKOVLEV, G., redaktor; TRUKHANOVA, A., tekhnicheskiy
redaktor

[Metal cutting; fundamentals on metal cutting processes] Rezanie
metallov; osnovnye poniatiiia o protsessakh rezaniia metallov.
Minsk, Gos.izd-vo BSSR, 1955. 187 p. (MLRA 9:1)
(Metal cutting)

YAKOVLEV, G.M.

PHASE I BOOK EXPLOITATION

366

Yakovlev, G.M.

Kachestvo poverkhnosti i tochnost' obrabotki na metallorezhushchikh stankakh (Surface Quality and Precision in Machining Metals) Minsk, Gos. izd-vo BSSR, 1956. -113 p. (Bibliotekha rabochego mashinostroyatelya) 3,000 copies printed.

Sponsoring Agency: NTO Belmashprom respublikanskiy dom tekhniki

Ed.: Goranskiy, G.; Tech. Ed.: Stapanova, N.

PURPOSE: The book is intended for fourth-to-seventh class machinists, and it may be useful to machine shop foremen, MTS mechanics, and students in trade and technical schools.

COVERAGE: The author acquaints skilled workers with the physical and mechanical properties of the surface layer, smoothness of machined surfaces, and precision of machining, as well as with contemporary finish machining methods. Data on surface-

Card 1/6

Surface Quality and Precision in Machining Metals 366

layer forming processes during machining operations and control (standardization) of the degree of surface finish are included. There are no references.

TABLE OF
CONTENTS: PART I. SURFACE QUALITY OF MACHINE PARTS

| | |
|---|----|
| 1. Microgeometry of the Surface Layer | 3 |
| Effect of friction and built-up edge of the chip | 5 |
| Effect of cutting conditions | 6 |
| Effect of end relief and back rake angles | 15 |
| Effect of lubricants and coolants | 16 |
| 2. Effect of Surface Microgeometry on the Operating Properties of Machine Parts | 16 |
| Effect of microgeometry on resistance to wear | 17 |
| Effect of microgeometry on endurance (fatigue resistance) | 19 |

Card 2/6

| | |
|--|-----|
| Surface Quality and Precision in Machining Metals | 366 |
| Effect of microgeometry on resistance to corrosion | 20 |
| 3. Physical and Mechanical Properties of the Surface Layer | 21 |
| 4. Control(Standardization) of Surface Finish | 24 |
| GOST 2789-51. Surface finish | 25 |
| 5. Instruments for Measuring Surface Microirregularities | 29 |
| Kiselev's profilometer | 32 |
| Levin's profilometer, model IZP-17 | 33 |
| Ammon's profilometer | 34 |
| Linnik's dual microscope MIS-11 | 36 |
| Linnik's microinterferometer | 37 |
| Pneumatic method of microgeometry control | 37 |

Card 3/6

| | |
|--|-----|
| Surface Quality and Precision in Machining Metals | 366 |
| The "imprint" method of determining surface finish | 38 |
| 6. Finishing Methods Employed in Machining Parts Using Metal Tools | 38 |
| Fine boring and dressing | 39 |
| Fine milling | |
| Fine milling parts in the form of bodies of revolution | 42 |
| Reaming | 43 |
| Broaching | 44 |
| 7. Finish Working of Surfaces Using Pressure (Cold-flow Working) Finishing Methods | 47 |
| Burnishing with rollers | 48 |
| Ball gage calibration | 49 |

Card 4/6

| | |
|--|-----|
| Surface Quality and Precision in Machining Metals | 366 |
| Hole finishing with rollers | 50 |
| 8. Finishing Methods Employed in Machining Parts Using Abrasive Tools | 50 |
| Grinding | 50 |
| Fine grinding | 55 |
| Honing | 56 |
| Superfinishing | 59 |
| Lapping | 61 |
| Polishing | 64 |
| Hydro-polishing | 65 |
| 9. Electrochemical Methods of Finishing Metallic Surfaces | 67 |
| 10. Technologically Attainable Surface Finishes Using Various Methods | 69 |

Card 5/6

| | |
|--|-----|
| Surface Quality and Precision in Machining Metals | 366 |
| Effect of working conditions on surface microgeometry | 70 |
| Effect of end relief angle on surface finish | 71 |
| PART II. PRECISION OF MACHINING MACHINE PARTS | |
| 11. Importance of Precision in Machine Building | 77 |
| Interchangeability | 77 |
| 12. Causes of Errors in Machining | 80 |
| Attainable precision | 80 |
| Economical precision. Precision attained under various machining methods | 84 |
| 13. Allowances and Tolerances | 90 |
| Basic concepts and definitions | 90 |
| Systems of allowances | 93 |
| Classes of precision | 94 |
| Appendices | 105 |

AVAILABLE: Library of Congress (TJ1185.I37)
Card 6/6

JAG/ksv
6-20-58

YAKOVLEV, G.M., Doc Tech Sci -- (diss) "Studies
principles
of the physical bases of high-speed milling and
grinding
sharpening." Minsk, 1957, 48 po with illustrations
(Min of Higher Education USSR. Len Polytechnic Inst
im M.I. Kalinin) 150 copies (KL, 29-58, 131)

- 45 -

YAKOVLEV, G.A.

21(B)

PILOT I RODZINNOSTI

217/2754

Vesorazhnye nauchno-tekhnicheskoy konferentsii po priemnyyu radioaktivnykh i radioaktivnykh izotopov i radioaktivnykh reaktyivov v nauchno-vyrobchikovskoy i stolichnoy radioaktivnoy laboratoriy 1 ianuary v narodnom kartye naute 1 nauchnoe knizhe Kosova, 1957.

Trudy... Paninotopologiya i priborostroeniye (Transactions of the All-Union Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and Science) Kachin' i In-trenstv Narodnogo Politekhnicheskogo Instituta po radioaktivnym i radioaktivnoy poligrafii) Moscow, Izd-vo AN SSSR, 1958. 153 p. 4,500 copies printed.

Sponsoring Agencies: USSR, Glavnoye upravleniye po ispol'sovaniyu atomnoy energii, and Akademiya Nauk SSSR.

Editorial Board of Seti V.I. Dikashin, Academician (Rep. Ed.), N.M. Smirnov (Deputy Rep. Ed.), Yu. S. Zaslavsky (Deputy Rep. Ed.), N.M. Ed.) L.K. Tsvetanova, B.M. Verchovatko, Sov. Narodnyi Uch. Peterman and M.G. Zvezinskaya (Secretary).

Sci. of Publishing House: P.M. Balyanin, Tech. Ed.; T.P. Poleneva.

Purpose: This book is intended for specialists in the field of machine and instrument manufacture who use radioactive isotopes in the study of materials and processes.

COVERAGE: This collection of papers covers a very wide field of the utilization of tracer methods in industrial research and control techniques. The topics include: volume of the use of radioisotopes in the machine and instrument-manufacturing industry. The individual papers discuss the applications of radioisotope techniques in the study of metals and alloys, problems of friction and lubrication, metal cutting, engine performance, and defects in metals. Several papers are devoted to the use of radioisotopes in the automation of industrial processes, recording and measuring devices, quality control, flowmeter, level gauges, safety devices, radiation counter, etc. These papers represent contributions of various Soviet institutes and laboratories. They were published in transactions of the All-Union Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and Science, April 4-12, 1957. No page numbers are mentioned. References are given at the end of most of the papers.

Tikhonov, I. (Bhar) 'Novyye avtodynamychnyye issledovaniya - Rezonans Avtodynamy' (New Autodynamic Studies - Resonance Autodynamics). Institute of Aircraft Engines. Study of the Wear of Parts in Fuel Supply Systems of Aircraft Engines. 78

Vysotsky, D.F., O.I. Belogol'skoy, V.I. Golov, V.P. Kuznetsov, and Yu. G. Kochubey (Vsesoyuznyy nauchno-issledovatel'nyy avtomobilei i avtomotornyy institut - Central Scientific Research Institute for Automobiles and Automobile Engines). Mobile Road-test Laboratory for the Study of the Effect of Dust in Air and the Type of Air Filter on the Wear of Pistons. Rings in Engines. 82

Melik-Zade, M. (Azerbaydzhan'skiy nauchno-issledovatel'stvennyy institut po neftyanoye - Azerbaydzhan Scientific Research Institute for Petroleum Refining). Apparatus for the Study of Friction Formation on Friction Surfaces. 86

Kalinushkin, O.Ye. (Central'nyy nauchno-issledovatel'stvennyy denezhnyy institut - Central Diesel Research Institute). Counter for the Measurement of Radioactivity in Liquids. 89

Karakun, M.J. (Institut mashinostroyeniya AN SSSR - Institute of Mechanical Engineering, Academy of Sciences, USSR). Research on Metal Cutting. 94

Lazebnik, M.D. (Institut mashinostroyeniya AN SSSR - Institute of Mechanical Engineering, Academy of Sciences, USSR). Study of the Wear of Hard-dialedyed Cutting Tools. 101

Zabekly, G.M. (Belorussky politekhnicheskiy institut - Belarusian Polytechnical Institute). Study of the Wear of Cutting Tools. 105*1*

PHASE I BOOK EXPLOITATION

SOV/3976

Yakovlev, Georgiy Mikhaylovich

Nekotoryye voprosy skorostnogo frezervaniya i tocheniya
(Some Problems in High-Speed Milling and Turning) Minsk,
Gosizdat BSSR, 1960. 357 p. Errata slip inserted. 2,000
copies printed.

Ed.: P. Yashcheritsyn; Tech. Ed.: N. Stepanova.

PURPOSE: This book is intended for process engineers and
scientists interested in high-speed machining of metal.

COVERAGE: The author discusses the formation of a heap of
collected material (built-up edge) on the point of a tool
during cutting, the results of experimental research in
wear due to high-speed cutting and use of carbide tipped
tools, the physical processes of high-speed cutting and
factors affecting the formation of chips, and individual
problems in milling. The experimental work was carried
out at the Belorusskiy politekhnicheskiy institut

Card 1/5

Some Problems in High-Speed (Cont.)

SOV/3976

(Belorussian Polytechnic Institute) with the participation of V. A. Vasil'yev, A. A. Chubchenko, and N. P. Gaydukevich. There are 233 references: 212 Soviet, 11 English, 9 German, 1 French.

TABLE OF CONTENTS

| | |
|--|----|
| Foreword | 3 |
| Ch. 1. Process of Heap Formation | 8 |
| 1. Introduction | 8 |
| 2. External view of heaps (built-up edges) due to cutting and friction conditions | 10 |
| 3. External view of the shear zone of chips during low speeds | 18 |
| Ch. 2. Physical Wear Processes of Single Point Tools and Milling Cutters | 29 |
| 1. Introduction | 29 |
| 2. Investigation of the nature and intensity of friction wear as related to the sliding speed of unit pressure | 33 |

Card 2/5

YAKOVLEV, G.M., doktor tekhn. nauk, prof.

[Some problems of the reliability and durability of machinery]
Nekotorye voprosy nadezhnosti i dolgovechnosti mashin. Minsk,
In-t nauchno-tekhn. informatsii i propagandy, 1963. 48 p.
(MIRA 18:5)

YAKOVLEV, G.M.

Methodology and diagnostic evaluation of the determination
of the acidity of gastric juice by ion-exchange resins.
Lab. delo no. 8:474-477 '64. (MIRA 17:12)

1. Kafedra voyenno-medskoy i gospital'noy terapii (nachal'nik-
prof. Z.M.Volynskiy) Voyenno-meditsinskoy ordena Lenina akademii
im. S.M.Kirova, Leningrad.

ZAYTSEV, A.A.; KOSYAKOV, V.N.; RYKOV, A.G.; SOBOLEV, Yu.P.;
YAKOVLEV, G.N.

[Kinetics of americium (V) reduction by hydrogen peroxide]
Kinetika vosstanovleniya ameritsiiia (V) perekis'iu vodoroda.
Moskva, In-t atomnoi energii AN SSSR, 1960. 11 p.

(MIRA 16:12)

(Americium) (Reduction, Chemical)

29903

16, 2600

S/517/61/060/000/009/009
B112/B125

AUTHOR: Yakovlev, G. N.

TITLE: Boundary properties of a certain class of functions

SOURCE: Akademiya nauk SSSR. Matematicheskiy institut. Trudy.
v. 60, 1961, 325 - 349

TEXT: The author investigates the behavior of functions of a class $W_p^{(1)}(G, \sigma)$ on the boundary Γ of a two-dimensional region G . A function u is said to be a member of the class $W_p^{(1)}(G, \sigma)$ if u^p is summable over G , and if u has generalized derivatives in G , which satisfy the inequality

$$\iint_G \sigma(x, y) \left(\left| \frac{\partial u}{\partial x} \right|^p + \left| \frac{\partial u}{\partial y} \right|^p \right) dx dy < \infty.$$
 σ is a certain weight function. The principal result of the paper is the following: For each function $u \in W_p^{(1)}(G, \sigma)$ there exists a function $f(s) = u(x, y)$ which satisfies the

Card 1/2

✓

Boundary properties of a certain...

29903
S/517/61/060/000/009/009
B112/B125

inequality

$$\iint_{\Gamma \times \Gamma} \sigma^*(s_1, s_2) (|f(s_1) - f(s_2)|^p / |s_1 - s_2|^p) ds_1 ds_2 ,$$

and vice versa. S. M. Nikol'skiy (Matem. sb., 1959, 33(75): 2, 261 - 326), L. D. Kudryavtsev (Trudy Matem. in-ta im. V. A. Steklova AN SSSR, 1959), and L. I. Lizorkin (DAN SSSR, 1953, 126, No. 4, 703 - 706) are referred to. There are 10 references: 5 Soviet and 5 non-Soviet. The most recent reference to the English-language publication reads as follows:
C. B. Morrey. Functions of several variables and absolute continuity.
II. Duke Math. Journ., 1960, 6, 1, 187 - 215.

Card 2/2

YAKOVLEV, G.N.

Boundary properties of class $W_p^{(1)}$ functions on regions having
salient points. Dokl. AN SSSR 140 no.1:73-76 S.-O '61.
(MIRA 14:9)
1. Matematicheskiy institut im. V.A.Steklova AN SSSR. Predstavleno
akademikom M.A.Lavrent'yevym.
(Functional analysis) (Boundary value problems)

YAKOVLEV, G.N.

Yakovlev, G.N., and Krol', M.I. "New construction methods for high-capacity ferrocement reservoirs," Stroit. prom-st', 1948, No. 12, p. 2-5

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

YAKOVLEV, G.N., dotsent.

Bridge made of hollow arches. Avt. dor. 19 no.10:27 0 '56.
(MIRA 9:12)

(Brazil--Bridges, Arched)

YAKOVLEV, G.N., dotsent.

Approximate method for designing arches allowing for lateral stability.
Avt.dor. 20 no.3:26-27 Mr '57. (MLRA 10:5)
(Arches)

YAKOVLEV, G.N., dots., kand.tekhn.nauk

Designing box-shaped long-span reinforced concrete bridges.
Trudy DIIT no.27:85-105 '58. (MHA 12:1)
(Bridges, Concrete--Design)

YAKOVLEV, G.N., dotsent

Minimum width of unhinged reinforced concrete arches. Avt,dor.
22 no.7:25-26 J1 '59. (MIRA 12:9)
(Bridges, Concrete)

YAKOVLEV, G.N., kand.tekhn.nauk, dotsent

Three-dimensional stability of arches with struts. Trudy DIIT
no.31:132-154 '61. (MIRA 15:5)
(Arches)

YAKOVLEV, G.N., kand.tekhn.nauk, dotsent

Determining the frequency of free spatial vibrations of arch
bridges. Trudy DIIT no.32:157-173 '61. (MIRA 16:2)
(Railroad bridges—Vibration)

YAKOVLEV, G.N.

Studies on the problem of ice breaking. Trudy AANII 267:54-63
'64 (MIRA 18:1)

GURICHEV, Ye. S.; DEDOV, V. B.; LEBEDEV, I. A.; YAKOVLEV, G. N.

"Extraction and some chemical properties of transplutonium elements."

report submitted for 3rd Intl Conf, Peaceful Uses of Atomic Energy, Geneva,
31 Aug-9 Sep 64.

L 40350-66 EWP(j)/EWT(m)/EWP(t)/ETI IJP(c) RM/WW/JW/JD/JG

ACC NR: AP6019151

(A)

SOURCE CODE:

UR/0186/66/008/001/0020/0026

42

40

B

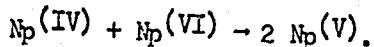
AUTHOR: Rykov, A. G.; Yakovlev, G. N.

ORG: none

TITLE: Study of redox reactions of actinide elements. Part 1: Kinetics of the reaction between neptunium (IV) and neptunium (VI) in perchlorate solutions

SOURCE: Radiokhimiya, v. 8, no. 1, 1966, 20-26

TOPIC TAGS: neptunium, oxidation reduction reaction, oxidation kinetics, perchlorate

ABSTRACT: The kinetics of the reaction between $\text{Np}(\text{IV})$ and $\text{Np}(\text{VI})$ ions were studied in perchlorate solutions with an ionic strength of 2.0. Spectrophotometric determination of the concentrations of Np (IV), (V), and (VI) showed that the stoichiometric reaction is given by the equationThe reaction is first order with respect to both $\text{Np}(\text{IV})$ and $\text{Np}(\text{VI})$:

$$v = \frac{d[\text{Np}(\text{IV})]}{dt} = k' [\text{Np}(\text{IV})][\text{Np}(\text{VI})].$$

A study of the reaction rate as a function of acidity and temperature was made. Since the reaction can proceed along several (at least two) parallel paths, the follow-

Card 1/2

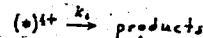
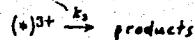
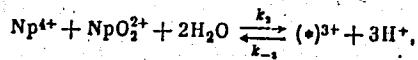
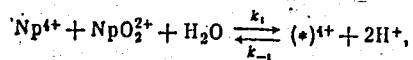
UDC: 541.127+546.799.3

L 40350-66

ACC NR: AP6019151

2.

ing reaction mechanism is proposed



where $(*)^n+$ stands for an activated complex of charge $+n$. The corresponding reaction rate constants were found. The thermodynamic quantities characterizing the process of formation of both activated complexes were obtained, and values of their formal entropies were calculated. Orig. art. has: 3 figures, 3 tables, and 15 formulas.

SUB CODE: 07/ SUHM DATE: 07Sep64/ ORIG REF: 002/ OTH REF: 021

me
Card 2/2

L 40349-66 EWP(j)/EWP(m)/EWP(t)/ETI
ACC NR: AP6019152

(A)

IJP(c) RM/WW/JD/JG

SOURCE CODE: UR/0186/66/008/001/0027/0032

31

B

AUTHOR: Rykov, A. G.; Yakovlev, G. N.

ORG: none

TITLE: Studies of redox reactions of actinide elements. Part 2: Kinetics of the re-action between neptunium (IV) and neptunium (VI) in nitrate solutions

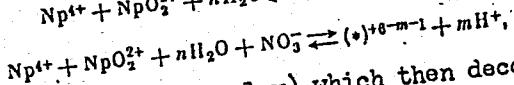
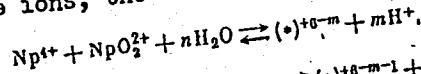
SOURCE: Radiokhimiya, v. 8, no. 1, 1966, 27-32

TOPIC TAGS: neptunium, oxidation reduction reaction, nitrate, oxidation kinetics

ABSTRACT: The effect of complexing of Np(IV) and Np(VI) with nitrate ions on the kinetics of the stoichiometric reaction $Np(IV) + Np(VI) \rightarrow 2 Np$ was investigated at an ionic strength of 2.0. The reaction is first order with respect to both Np(IV) and Np(VI):

$$-\frac{d[Np(IV)]}{dt} = \frac{1}{2} \frac{d[Np(VI)]}{dt} = k' [Np^{(IV)}][Np^{(VI)}]$$

In the presence of nitrate ions, the reaction passes through two activated complexes,



(where (*) stands for the activated complex) which then decompose via independent paths.

UDC: 541.127+546.799.3

Card 1/2

L 40349-66

ACC NR: AP6019152

The main path of the reaction involves the formation of an active complex whose composition includes only one NO_3^- ion. The thermodynamic quantities (ΔH^* , ΔG^* , ΔS^* , S^*) characterizing the formation of the nitrate activated complex were calculated. Orig. art. has: 2 figures, 3 tables, and 16 formulas.

SUB CODE: 07/ SUBM DATE: 07Sep64/ ORIG REF: 001/ OTH REF: 006

nd
Card 2/2

YAKOVLEV, G. N.

Yakovlev, G. N. - "On determining the changes in the thickness of the ice crust from its surface," Problemy Arktiki, 1948, (Published in 1949), No. 3, p. 149-51

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949)

YAKOVLEV, Guriy Nikolayevich; DZHAIALBEKOVA, L.A., otv.red.; KORENYUK,
Z.P., tekhn.red.

[Three hundred and seventy-six days on an ice floe] 376 dnei
na l'dine. Leningrad, Gos.izd-vo detskoi lit-ry, 1957. 189 p.
(Arctic regions) (MIRA 11:12)

YAKOVLEV, G.N.

Turbulent heat exchange between the ice cover and air in the Arctic.
(MIRA 11:12)
Probl. Arkt. no.2:193-204 '57.
(Arctic regions--Atmospheric temperature)